Content Syndication: Busting Content Silos



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Fred Smith

CDC Division of News and Electronic Media

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The Web Manager's Quest!





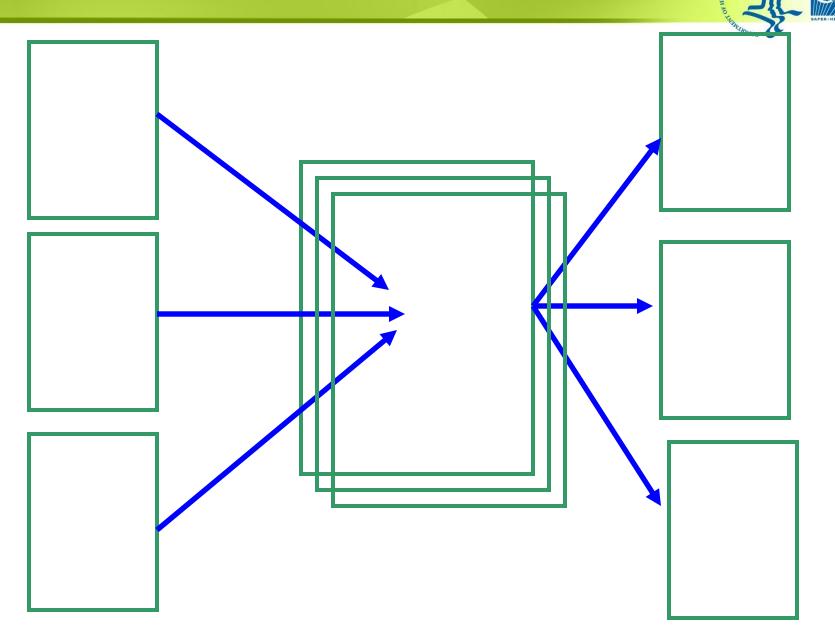
We're Not Talking RSS





CDC OADC DNEM

Whole Page Syndication: The Concept



The Challenges:



- •"Cut and paste" is very time consuming, with potential errors.
 - Difficult to update (and to know when something needs updating).
 - Difficult to manage In (public health) emergencies, information is rapidly changing).
 - Monitoring primary Web pages burdens all partners
 - Information may appear contradictory or inconsistent between different partner sites
 - Update messages often communicated through email – slow, inconsistent and a burden all parties.
 - Many hours of additional and unnecessary labor!





Content Syndication – the Innovative Solution

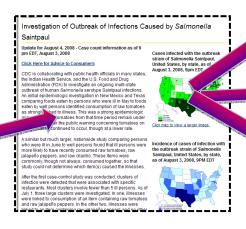


Information on a partner's website is automatically updated when CDC updates that particular Web page

CDC.gov



Syndicated Content





Partner Web Sites

CDC • OADC • DNEM

The Solution – Content Syndication



- Federal Web content even more appealing e.g, any updates made on a government web site automatically replicate on partner sites.
- Content owner retains editorial control.
- Can be used with any topic or content type.
- Fosters consistent information and messaging across sites.
- Enables more efficient use of resources (e.g., subscribers don't need to worry about updates and updating).
- Expands access to information and messages (e.g., content appears in multiple web sites – via more local sources).
- A wide range of partners state, tribal, local, territorial; commercial;
 educational and non-profit.

Bottom line – Content syndication reduces costs, reduces inconsistent information, and frees resources so content owners and partners can focus on more important activities.

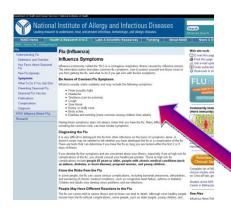
Three Types of Partner



- Publisher only
- Subscriber only
- Publisher/Subscriber

Content Publisher Website Example







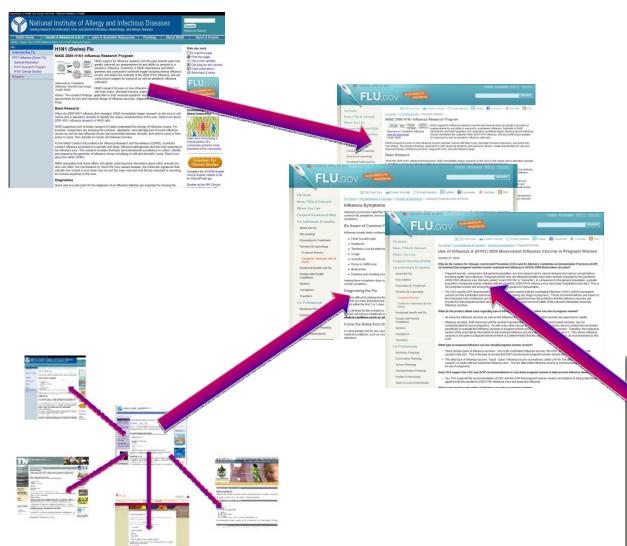






Topic-Based Subscriber Website Example

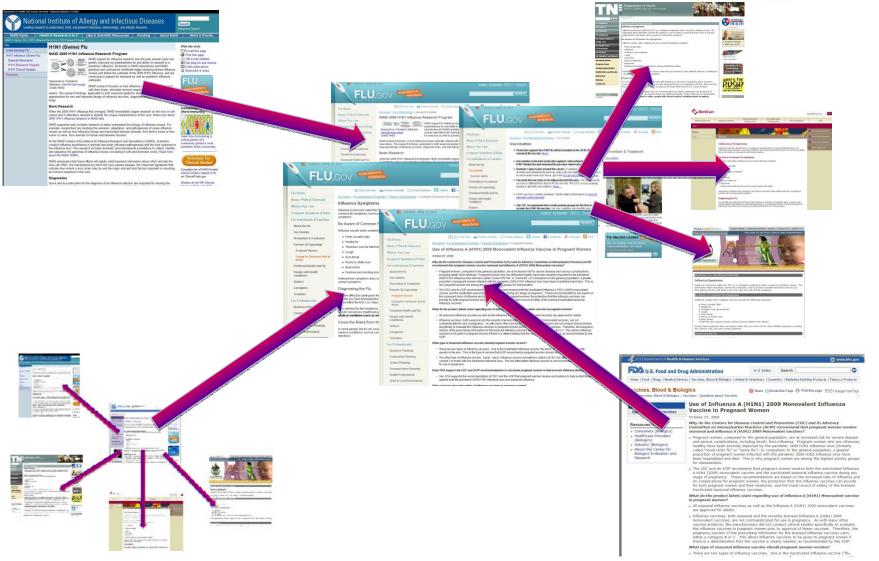






Topic-Based Publisher/Subscriber Example





CDC • OADC • DNEM

How Content Syndication Supported H1N1



Expanded visibility of CDC information on state, local, and partner Web sites

- 418,796 views of CDC H1N1 content via Content Syndication
- 450 Pages of H1N1 content are available for syndication
- 211 Pages of Seasonal Flu content is available for syndication

H1N1 (Swine) Flu

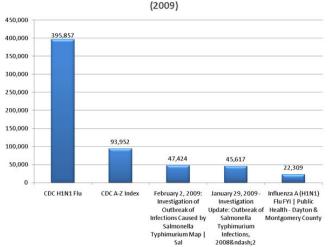
Page Name	Add ALL Pages to Your List
CDC H1N1 Flu H1N1 Flu Vaccination Resources	Add to List
CDC 2009 H1N1 Flu 2009 H1N1 U.S. Situation Update	• Add to List
CDC H1N1 Flu Swine Flu: General Information	• Add to List
CDC H1N1 Flu Guidance	• Add to List
CDC H1N1 Flu Interim Guidance for Novel H1N1 Flu (Swine Flu): Taking Care of a Sick Person in Your Home	Add to List
CDC H1N1 Flu	• Add to List
CDC H1N1 Flu H1N1 Flu and You	• Add to List
CDC H1N1 Flu What To Do if You Get Flu-Like Symptoms	Add to List
CDC H1N1 Flu Novel H1N1 U.S. Situation Update	Add to List
CDC H1N1 Flu Questions & Answers Novel H1N1 Influenza Vaccine	Add to List

More H1N1 (Swine) Flu »

Content syndication strengthened Flu.gov

- Helped ensure information consistency among Flu.gov, CDC.gov, FDA.gov and NIAID.NIH.gov – and facilitated migration of information to Flu.gov
- Over 100 pages of CDC/FDA/NIAID H1N1 pages were syndicated to Flu.gov
- Minimized information "ownership" battles
- Over 640,000 views of syndicated
 CDC/FDA/NIAID H1N1 content on Flu.gov

Top 5 Syndicated Pages



Impact/Outcome of CDC Content Syndication



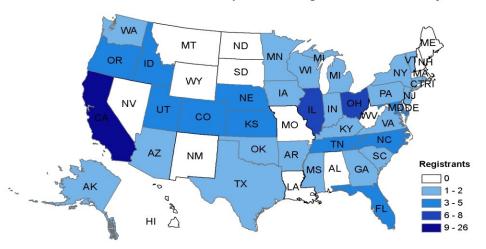
More than 150 public health partners – including state and local health departments, hospitals, universities and federal agencies – have implemented content syndication on their Web sites.

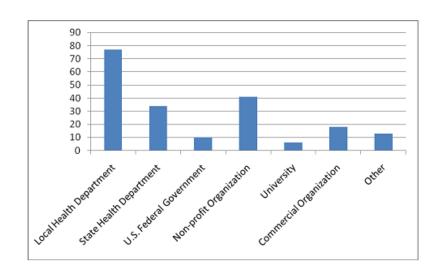
More than 3 million additional views of CDC content on other Web sites, including a one-month high of 770,000 page views (May 2009) during the height of the H1N1 emergency.

More than 1500 partner Web pages containing CDC syndicated content.

Content syndication is being used and tested in 37 of the 50 US states by State and Local health departments.

Number of State and Local Health Departments Registered for Content Syndication





Why Is Content Syndication Important for CDC?



Expands web and communication strategies

- Enables new partnerships to deliver or use CDC content
- Increases access to CDC information
- Increases the audience reach of CDC content
- Drives increased traffic back to the CDC site

Continues CDC's leadership role in using the Internet

- CDC is the first federal agency to develop and offer this capability.
- CDC works closely with HHS, FDA and NIAID to refine and enhance the technology to expand across all of HHS and then with other Federal partners.
- 9 out of 10 of the most visited web sites (e.g. Google, Yahoo, Amazon)
 provide similar capabilities.
- Supply this technology directly to state, tribal and local health agencies and other Federal agencies.
- Further establishes CDC as a primary source for health information.
- Could increase CDC web traffic by 30-50% over the next 3-5 years.

Benefits



Benefits for Federal, State, Tribal, Local and Territorial Governments and Health Agencies

- Rapid deployment of CDC content to their sites
 - Ability to integrate local information with national information for improved message delivery
- Consistent dissemination channels for Outbreaks and Emergency Responses could be established across health agency web sites
- Allows state and local technical resources to focus on their mission, instead of manually spending time monitoring CDC sites, and having to "cut and paste."
- Health agencies could offer their own original content to others for syndication, we would make our own technology available to them
- Increase their web site traffic by offering new content to their audiences
- Increase value to their audiences



CDC = OADC = DNEM
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Benefits Beyond Health Agencies



Increased market reach by partnering with commercial partners like WebMD, Microsoft HealthVault, Google Health, Epocrates, etc.

- Currently in discussions with WebMD, AMA, and Epocrates to use syndicated content
- Usage by large commercial sites could further increase CDC web traffic by 50-100% in 3-5 years

Open government support

- Provides access to health information, improving collaboration opportunities with health partners
- Enables citizens and health partners to create innovative web applications





Morris Hospital, Illinois

http://www.morrishospital.org/index.cfm?pageID=205







A-Z Index

Search



Home | Food | Drugs | Medical Devices | Vaccines, Blood & Biologics | Animal & Veterinary | Cosmetics | Radiation-Emitting Products | Tobacco Products

Tobacco Products

Home > Tobacco Products







Tobacco Products Scientific Advisory Committee

The inaugural meeting of the Tobacco Products Scientific Advisory Committee was held March 30-31, 2010. The archived webcast is now available.



Protecting Kids from Tobacco

A new rule prohibits the sale, distribution. marketing and promotion of cigarettes and smokeless tobacco to children and adolescents. The Center for Tobacco Products Call Center, 1-877-CTP-1373, provides information about the new rule.



Public Dockets for Comment

FDA has established a public docket to provide an opportunity for interested parties to share information, research, and ideas on how use of dissolvable tobacco products may impact public health.

Spotlight

- · Watch the Archived Webcast of the March 30-31 Meeting of the Tobacco Products Scientific Advisory Committee (TPSAC) @
- Jobs at the Center for Tobacco Products (CTP)
- Final Guidance for Industry: Tobacco Health Document Submission

Tools

- Calculator: How Much Does Smoking Cost You? @
- . How Does Smoking Affect Your Lifespan? @

News & Events (Tobacco)

Press Releases, FAQs, Progress Reports, and

Protecting Kids from Tobacco

FDA is working to protect the health of

Contact Us

Text size: S M L XL

Bookmark and share

Character Listen to audio/Podcas

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Centers for Disease Control and Prevention Your Online Source for Credible Health Information A-Z Index A B C D E E C H I J K L M N O P Q R S I U Y W X Y Z #

g0

Smoking & Tobacco Use Home | Food | Drugs | Medical D Home

Resources

Tobacco Control

on Smoking and Health

Youth Tobacco Prevention

CDC Home

SEARCH

Tobacco Products

Home > Tobacco Products



Tobacco Produ Scientific Advis Frequently Asked Committee

The inaugural meeting of the Tobacco Products Scientific Advisory Committee was held March 30-31, 2010. The archived webcast is now available.

About This Office Quit Smoking TOBACCO Basic Information Data and Statistics State and Community

CONTROL STATE HIGHLIGHTS 2010

New Report



sale, distribution, marketing and promotion of cigarettes and smokeless tobacco to children and adolescents. The Center for Tobacco Products Call Center, 1-877-CTP-1373, provides information about the new rule.

Resources For You





parties to share information, research, and ideas on how use of dissolvable tobacco products may impact public health.





Spotlight

 Tobacco Control State-by-State Interactive Map

Tools

- Calculator: How Much Does Smoking Cost You? &
- How Does Smoking Affect Your Lifespan? @

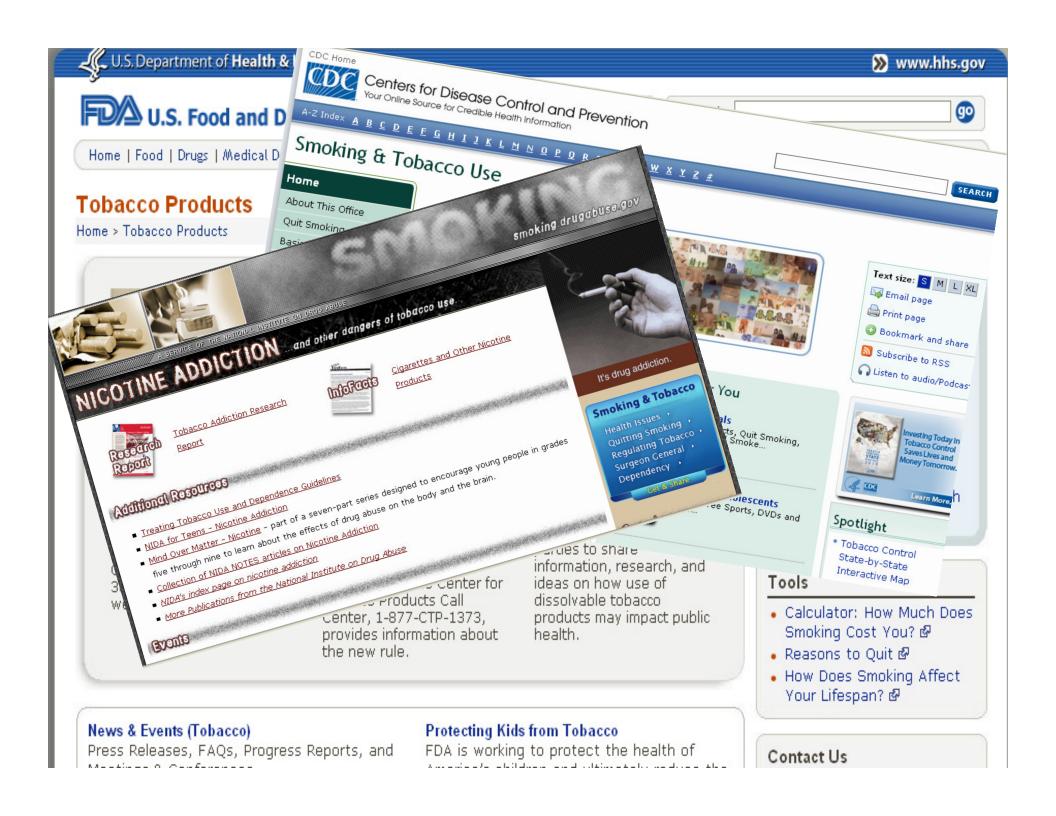
News & Events (Tobacco)

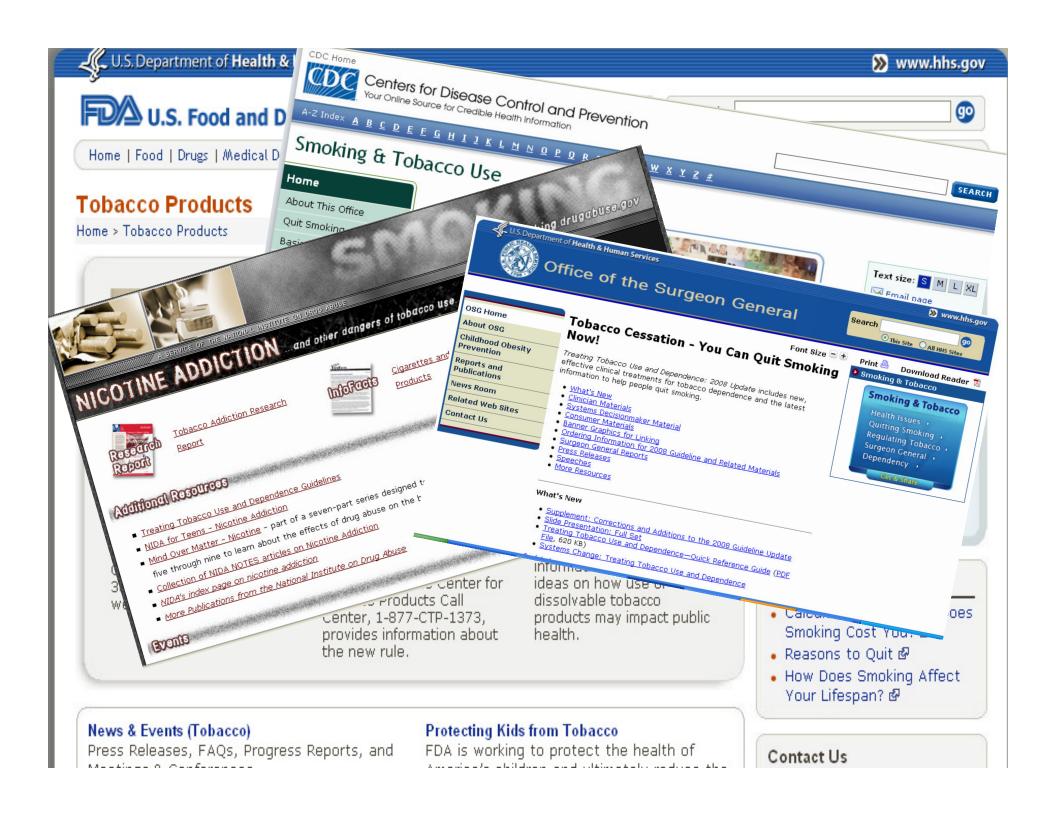
Press Releases, FAQs, Progress Reports, and

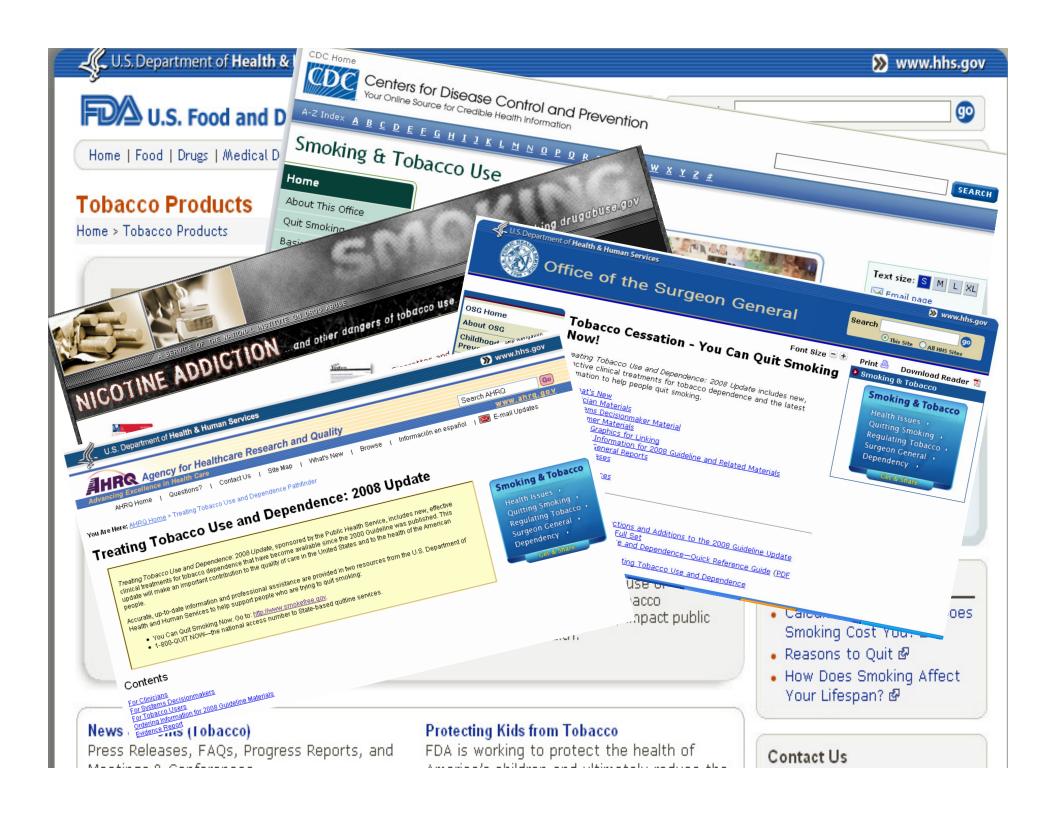
Protecting Kids from Tobacco

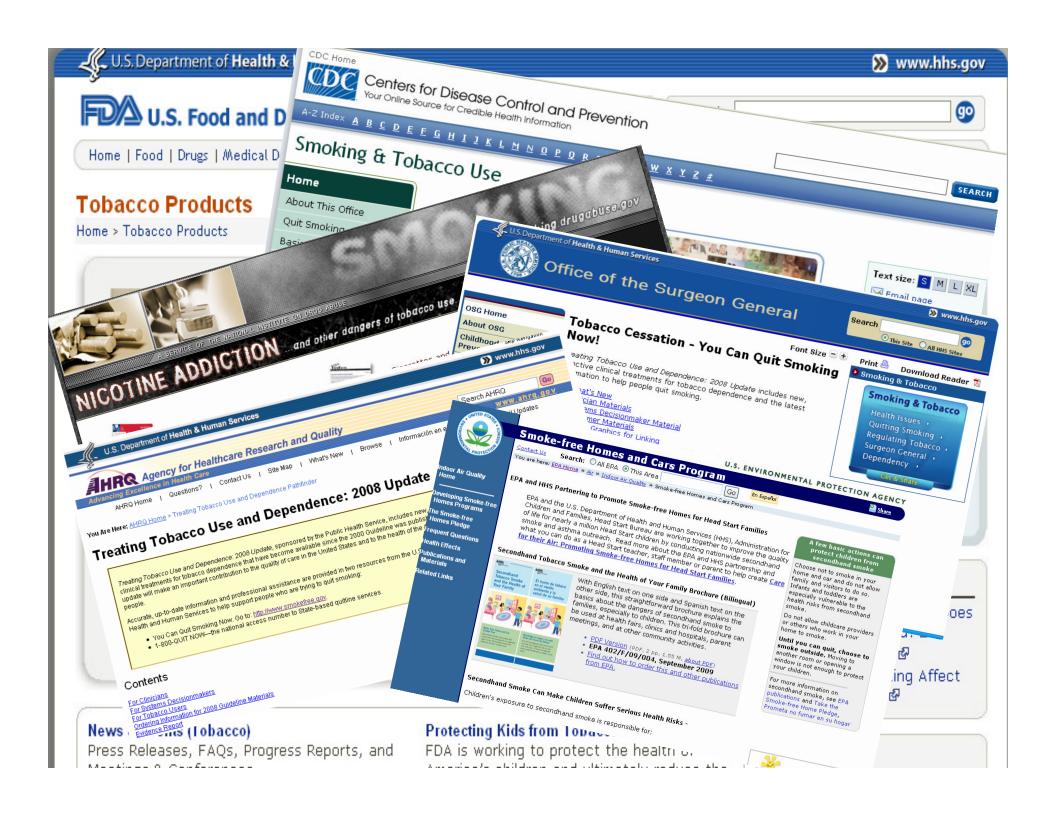
FDA is working to protect the health of

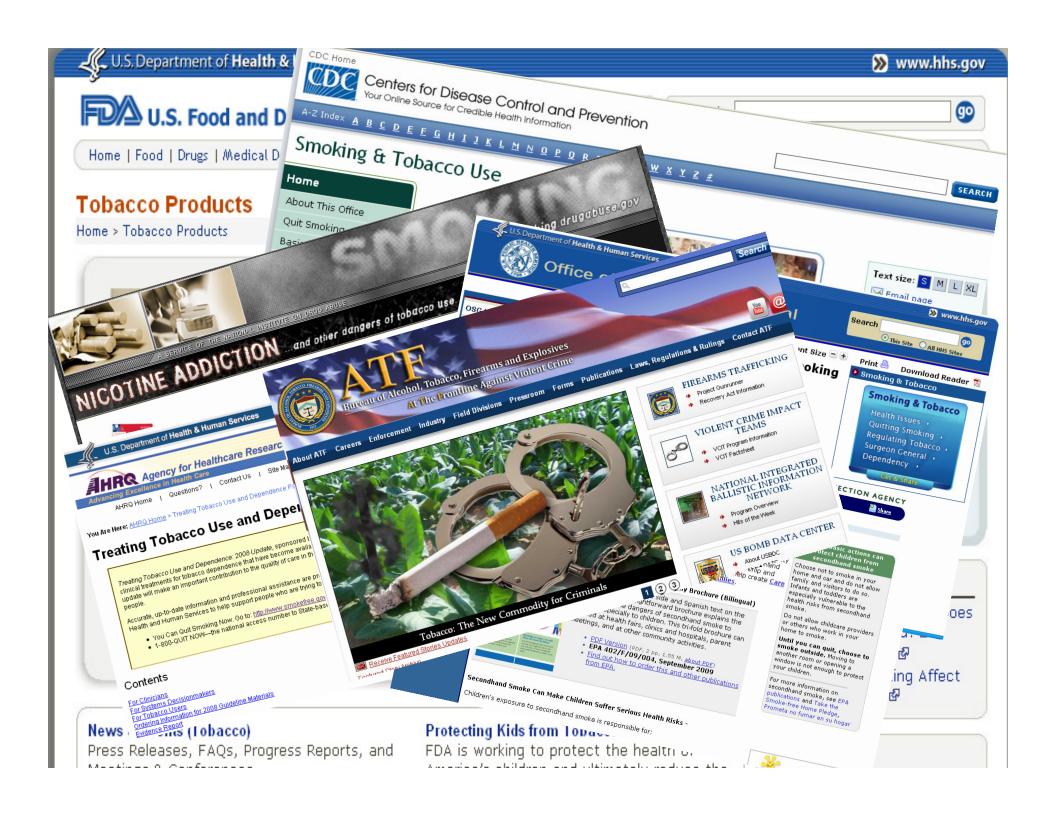
Contact Us

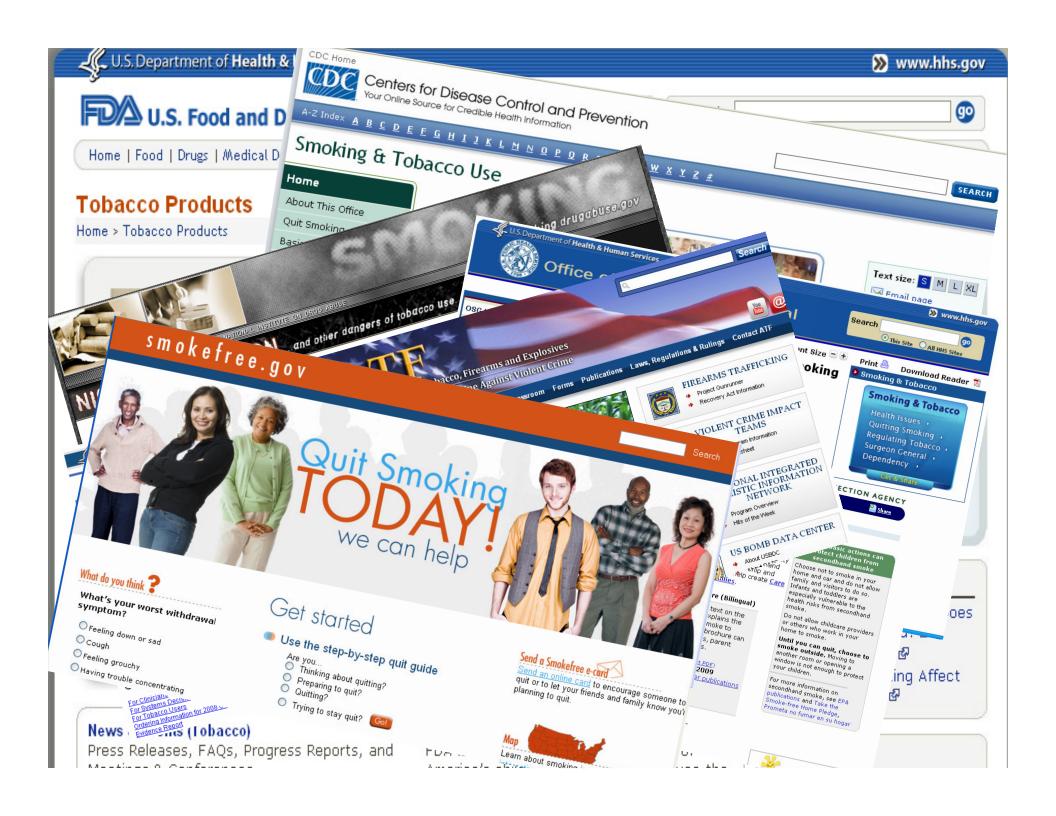
















Results 1 - 10 of about 5,300,000 for site:.gov tobacco.

Smoking and **Tobacco** Use:: Office on Smoking and Health (OSH):: CDC 🏗

Nov 17, 2009 ... Maintained by the CDC's Office on Smoking and Health. Covers tobaccorelated issues, statistics, news, research, data, reports, ... Data and Statistics - Quit Smoking - Basic Information www.cdc.gov/tobacco/ - Cached - Similar

CDC - Health Topic: Smoking and Tobacco Use 🏗

Information from the US Centers for Disease Control and Prevention. www.cdc.gov/doc.do/id/0900f3ec802346d8 - Cached - Similar

Show more results from www.cdc.gov

Tobacco Program Home Page - WA State Dept. of Health 🏗

Tobacco remains the main cause of preventable disease and death in Washington state, killing about 7500 people every year. This despite major gains in ... www.doh.wa.gov/TOBACCO/default.htm - Cached

smoking.drugabuse.gov - Nicotine Addiction and the other Dangers ...

Nicotine addiction and other dangers of tobacco use, ... 2010 Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting February 24-27, 2010 ... smoking.drugabuse.gow - Cached - Similar

Tobacco 🏗

The inaugural meeting of the Tobacco Products Scientific Advisory Committee was held March 30-31, 2010. The archived webcast is now available. ... www.fda.gov > Tobacco Products - Cached - Similar

Sponsored Links

Facts About Tobacco

Data and Statistics About Tobacco and Smoking www.LungUSA.org

See your ad here »

Search:

Advanced Search

Web Show options...

Results 1 - 10 of about 5,300,000 for site:.gov tobacco,

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Data and Statistics About Tobacco and Smoking www.LungUSA.org

See your ad here »



Why Silos Exist



- Reflect owners work or responsibility
 - NIH=research; FDA=drugs; CDC=health; EPA=air quality; ATF=enforcement; NIDA=addiction;
 Women's Health, etc.
- Campaigns
- Turf
 - Funding (and branding)(and ego)
- Congressional Mandate
- Legacy

What Consumers Want





Panflu.gov





<u>Home</u> <u>Contact Us</u>

Get Informed. Be Prepared.

The official U.S. government Web site for information on pandemic flu and avian influenza.

General Information

- Key Facts
- Frequently Asked Questions
- Vaccines, Medications
- Background Information

Health & Safety

- For Families
- For Workers
- For Health Professionals
- Protecting Birds & Other Animals

Monitoring Outbreaks

- United States Surveillance
- International Surveillance

Planning & Response Activities

- National Strategy for Pandemic Influenza
- U.S. Department of Health & Human Services Pandemic Influenza Plan
- Federal Agency Activities
- State Pandemic Plans
- Risk Communication Resources

Travel & Transportation

- Travelers' Health
- Transportation Industry Information

Research Activities

- · Pandemic Research
- Vaccine Research
- Drug Development

National Strategy

The National Strategy for Pandemic Influenza guides our nation's preparedness and response to an influenza pandemic.

Highlights

The U.S. Department of Health & Human Services Pandemic Influenza Plan

News

- Press Releases
- Press Conferences
- Speeches
- Testimony

Related Links

Seasonal Flu

Know what to do about the flu.

SEARCH

Flu Home

News, PSAs & Outreach

Where You Live

Frequent Questions (FAQs)

For Individuals & Families

About the Flu

Vaccination

Prevention & Treatment

Parents (& Expecting)

Emotional Health and Flu

People with Health Conditions

Seniors

Caregivers

Travelers

For Professionals

Business Planning

Community Planning

School Planning



Get vaccinated!

H1N1 flu shots are widely available and everyone is urged to get vaccinated. Protect yourself in case there is a third flu wave this winter. Enter your zip code in the Flu Vaccine Locator to learn where to get vaccinated, or select your state from the dropdown menu below.

Flu Vaccine Locator Find flu clinics

Find flu clinics near you

Vaccine supplies may be limited. Check availability; call ahead.

Find flu shots near:

powered by Google

GO

Ask the Flu Experts!



Our experts have answered hundreds of questions this flu

Benefits of Syndication

THE SERVICES - USA

- Content serves multiple needs
- No turf battles
- Topical site aggregates cherry-picked content
 - Satisfies consumer need
- Office/campaign retains ownership
 - Satisfies bureaucratic need
- Maintenance stays with content owner/SME
 - Consistent and current content across all sites









Version History



Version 1.0

- Java Server Application
- Scrape on demand
- No content cacheing
- No off-loading of network traffic
- Limited API
- Not standards-based
- Private registration
- Version 1.5
 - NET Application
 - Content cacheing
 - CDN cacheing and network traffic off-load
 - Public registration; public catalog
 - Not fully standards compliant
 - Lack of real-time notifications
 - CDC Network specific

Version History



- Version 2.0 (In development)
 - Java and .NET versions
 - High level of cacheing and fault-tolerance
 - Real time notifications
 - Multiple nodes in a federated network
 - Sharable taxonomies
 - Standards-based with multiple formats
 - Robust, documented API
 - Architected for technology independence
 - Open sourced and freely distributed
 - Open requirements and interfaces, supporting any platform

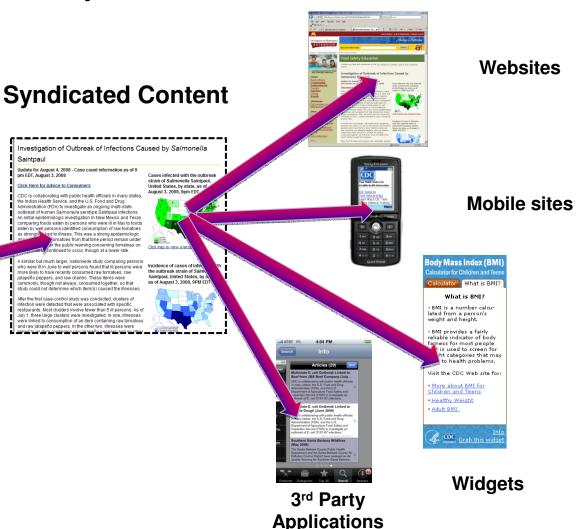
CDC = OADC = DNEM
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An Open API to Your Content



Syndication allows content to be reused in multiple channels, not just websites.





Future Directions



Federated Network of Distributed Nodes

- Make available the .NET and Java applications for partners to syndicate their own content as well as bring in content from others in the network.
- Initial Network roll-out will be late summer with CDC, HHS, FDA and NIAID.
- Second wave to include other Operating Divisions of HHS (CMS, NCI) another Federal
 agency and one or two state health departments.
- Expand to include non-health related topics, eg, Risk and Emergency Communications, Policy, Tax Law, etc. Essentially any and all topics.

Getting Started



As a subscriber:

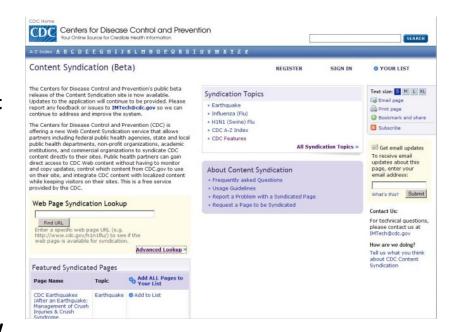
- 1.Register at http://tools.cdc.gov/register/
- 2.Select pages from the inventory of available content (a good sample page for consumer friendly content is "Current Healthy Living Feature Topic" http://t.cdc.gov/synd.aspx?js=1&url=http://t.cdc.gov/CKT)
- 3.Get the code from the system and begin testing.

As a content publisher:

Contact Fred Smith (<u>wfsmith@cdc.gov</u>) to discuss how to get included in future roll-out and expansion plans.

As an application developer:

Contact Fred Smith (<u>wfsmith@cdc.gov</u>) for a draft of the API documentation and URLs to standards-based feeds.



CDC Content Syndication 'Storefront'

http://tools.cdc.gov/register/

Testimonials



"With the syndication project, when the CDC updates its Web site with additional outbreak information, the Ohio Department of Health Web site is updated in real-time. An important advantage to this project is that messages are consistent across states and federal agencies because they all have access to the same information."

-- Dr. Michele Shipp, Assistant Director of the Ohio Department of Health

"With the implementation of content syndication, we could ensure that our users had access to the most up-to-date health information. The ease of set-up and the ability to select additional content to our site has allowed the County to be confident that we would have updated information for the most relevant health-related topics, such as H1N1 and seasonal flu as well as the flood and e-coli information, without additional labor on our part."

-- Kathy Hughes, Public Relations Director, Buncombe County, NC Department of Health





http://www.buncombecounty.org/governing/depts/health/cdc/cdc_report.asp?title=flu_map

The Content Syndication Team



Core Design & Implementation Team

CDC

- Carol Crawford
- Fred Smith
- Scott Mullins
- Kathleen Carey
- Cassian Pallansch (CTR)
- Thomas Williams (CTR)
- Jim Arnzen (CTR)
- Mike Peltz (CTR)
- Dave Cummo (CTR)

FDA

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- Dan Luxenberg
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- Beau Brooks
- Donna Avallone

HHS/ASPA

- Prudence Goforth
- Dick Stapleton
- Craig Lafond
- Ted Hsieh
- Ben Nall (CTR)
- Aaron Stowell (CTR)
- Ben Miller (CTR)

NIH/NIAID

- Tori Matthews
- Christen Geiler
- Holly Irving
- Jake Jester
- Song Chen
- Krista Townsend
- Andrew Murphy
- Leon Orshanski